

RECEIVED
CENTRAL FAX CENTER
AUG 09 2007

PATENT APPLN. NO. 10/625,724
RESPONSE UNDER 37 C.F.R. §1.111

PATENT
NON-FINAL

REMARKS

Claim 1 has been amended to precisely recite that the hydrogen absorbing alloy of the negative electrode of the nickel metal hydride storage battery of the present invention contains aluminum as a component of the alloy and to include the limitation recited in claim 2, i.e., to limit the complex-forming agent which forms a complex with aluminum ions and that is included in the negative electrode to an aromatic carboxylic acid.

Referring to the Action, claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Tani et al. (2002/0197530) (hereinafter: "Tani").

Claim 1 of the present application is directed to a nickel metal hydride storage battery comprising a positive electrode comprising nickel hydroxide as an active material, a negative electrode comprising a hydrogen absorbing alloy containing aluminum, a separator and an alkaline electrolyte, wherein a complex-forming agent which forms a complex with aluminum ions is included in the negative electrode. Claim 2 limits the complex-forming agent which forms a complex with aluminum ions to an aromatic carboxylic acid.

Tani discloses an alkaline rechargeable battery having negative electrode formed of a powdery composite material

comprising a plurality of powdery composites having a structure comprising a core whose surface is covered by a coat layer. The core comprises an alloy particle of an alloy (a) capable of reversibly storing and releasing hydrogen as a main component, the alloy (a) containing at least one kind of a metal element (a-i) selected from the group consisting of Zr, Ti and V as a main constituent element. The coat layer comprises a hydrous oxide (including a hydroxide) of a metal element (b) having an affinity with oxygen which is greater than that of any of said metal elements (a-i). The coat layer has particles of a catalytic metal or a metal compound inside or/and in the surface region of the coat layer which have a catalytic function to place the hydrogen in an active state.

The element (b) of the coat layer of the powdery composite material of Tani is preferably Al or a combination of Al and Mg (paragraph [0101]). Tani discloses (see paragraphs [0124] and [0125]) that the catalytic metal particles can be retained on a carrier comprising aluminum oxide by a method "wherein a metal salt capable of being a carrier such as magnesium nitrate or aluminum nitrate and a complexing agent such as citric acid are fused and solidified, the resultant is thermally decomposed, followed by subjecting to a reducing treatment, whereby a nickel powder

retained on magnesium oxide or aluminum oxide as the carrier is obtained." (Paragraph [0125], lines 4-11 in the right column on page 11).

The position of the Office is understood to be, first, that the powdery composite of Tani which comprises a core made of a metal alloy and whose surface is covered by a coat layer of aluminum oxide is a hydrogen absorbing alloy containing aluminum. The Office cites page 4, paragraph [0038] and page 5, paragraph [0040] as support for this position. (See page 3, lines 3-6, of the Action).

Second, the Office apparently considers the complexing agent, which is used in the method described in paragraph [0125] of Tani to retain the catalytic metal on the carrier of aluminum oxide, to be a complex-forming agent which forms a complex with aluminum ions and to be included in the negative electrode as required by claim 1 of the application. (See page 3, lines 8-9, of the Action).

Third, it is the position of the Office that citric acid is an aromatic carboxylic acid as recited in claim 2 of the application. (See page 3, lines 10-11, of the Action).

Applicants respectfully submit that Tani is insufficient to support a case of anticipation of the claims of the present application, particularly as amended above.

First, the powdery composite of Tani which comprises a core made of a metal alloy and whose surface is covered by a coat layer of aluminum oxide is not a hydrogen absorbing alloy containing aluminum as a component of the alloy. An alloy coated with aluminum as disclosed in Tani is not an alloy containing aluminum as a component of the alloy.

Second, the Office has not provided any reasoning or evidence to support its conclusion that the complexing agent used in the method described in paragraph [0125] of Tani forms a complex with aluminum ions. Nor has the Office provided reasoning or evidence to support its conclusion that the complexing agent would be included in the negative electrode of Tani.

Paragraph [0125] of Tani describes:

"(a)s the method for retaining the metal powder on the carrier, there can be mentioned, for example, a method wherein a solution of a readily decomposable metal salt such as nickel nitrate is impregnated in aforesaid carrier, the resultant is dried and thermally decomposed, followed by subjecting to a reduction treatment whereby a nickel powder retained on the carrier is obtained; . . .".

Under conditions of thermally decomposition and a reduction treatment where a metal salt is decomposed to metal a complexing agent such as citric acid would also be expected to be decomposed. Therefore, it is not certain that a complexing agent such as citric acid is included in the negative electrode of Tani. Anticipation

under 35 U.S.C. § 102 requires that a claim limitation or limitations must necessarily be included in a prior art reference in order for the reference to anticipate. The fact that a limitation might result from the disclosure of a reference is not sufficient. See *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) and *In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986).

Third, citric acid (i.e., 2-hydroxypropane-1,2,3-tricarboxylic acid) has no aromaticity and is not an aromatic carboxylic acid.

For the above reasons, claims 1 and 3 are not anticipated by Tani and removal of the 35 U.S.C. § 102 rejection and issuance of a notice of allowability of claims 1 and 3 are in order and are requested.

The foregoing is believed to be a complete and proper response to the Office Action dated May 10, 2007, and is believed to place this application in condition for allowance. If, however, minor issues remain that can be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number indicated below.

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of

PATENT APPLN. NO. 10/625,724
RESPONSE UNDER 37 C.F.R. §1.111

PATENT
NON-FINAL

time. The fee for any such extension may be charged to our Deposit Account No. 111833.

In the event any additional fees are required, please also charge our Deposit Account No. 111833.

Respectfully submitted,

KUBOVCIK & KUBOVCIK



Ronald J. Kubovcik
Reg. No. 25,401

Atty. Case No. SNY-035
The Farragut Building
Suite 710
900 17th Street, N.W.
Washington, D.C. 20006
Tel: (202) 887-9023
Fax: (202) 887-9093
RJK/ff